

**ABSTRACT**

Techniques are described for analog-to-digital signal conversion. According to exemplary embodiments, a first request is associated with a changeable set of a plurality of input terminals, a second request is associated with a changeable one of the input terminals, and a third request is associated with a fixed one of the input terminals. One of the first, second, and third requests is received, and an analog signal presented at one of the input terminals is converted into a digital value based on the received one of the first, second, and third requests. When one of the second and third requests is received while converting a plurality of analog signals presented at the changeable set of the input terminals, a determination can be made whether the changeable set of the input terminals includes the one of the changeable and fixed input terminals associated with the received request.